MATERIAL SAFETY DATA SHEET
USG SHEETROCK® Brand First Coat

United States Gypsum Company
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A Subsidiary of USG Corporation

Product Safety: 1 (800) 507-8899
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SECTION 1
CHEMICAL PRODUCT AND IDENTIFICATION

PRODUCT: USG SHEETROCK® Brand First Coat
CHEMICAL FAMILY: An aqueous mixture of minerals and an emulsion polymer

SECTION 2
COMPOSITION, INFORMATION ON INGREDIENTS

MATERIAL	WT%	TLV (mg/m³)	PEL(mg/m³)	CAS NUMBER
Water	>40	(NE)	(NE)	7732-18-5
Vinyl Acetate Butyl Acrylate Polymer	<20	(NE)	(NE)	25067-01-0
Kaolin	<20	2(R)	15(T)/5(R)	1332-58-7
Limestone	<10	10	15(T)/5(R)	1317-65-3
Titanium Dioxide	<5	10	15	13463-67-7
Mica	<5	3(R)	20 mppcf	12001-26-2
Ethylene Glycol	1-3	100 ceiling	(NE)	107-21-1
Petroleum Distillates	0-1	5(mist)	5(mist)	64741-88-4
Crystalline Silica	<5	0.05(R)	0.1(R)	14808-60-7

(T) – Total (R) – Respirable (NE) – Not Established mmpfc - million particles per cubic foot of air
Respirable crystalline silica: IARC: Group 1 carcinogen, NTP: Known human carcinogen. The weight percent for silica represents total quartz and not the respirable fraction.

FDA Food and Drug Administration [CFR Title 21, v.3, sec 184.1409] – Ground limestone is Generally Recognized as Safe (GRAS).

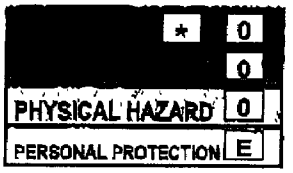
All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory. All components of this product are included in the Canadian Domestic Substances List (DSL).

SECTION 3
HAZARD IDENTIFICATION

INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS

NFPA Ratings:
Health: 0
Fire: 0
Reactivity: 0

HIMS Ratings:
Health: *0
Fire: 0
Reactivity: 0



0 = Minimal Hazard
1 = Slight Hazard
2 = Moderate Hazard
3 = Serious Hazard
4 = Severe Hazard

Personal Protection: Use eye and skin protection. Use NIOSH/MSHA-approved respiratory protection when necessary.
*Respirable crystalline silica can cause lung disease and/or cancer. E- Safety glasses, gloves and dust respirator
Prolonged and repeated breathing of respirable mica dust may cause lung disease (pneumoconiosis).

EMERGENCY OVERVIEW: This product is not expected to produce any unusual hazards during normal use. Exposure to high dust or mist levels may irritate the skin, eyes, nose, throat, or upper respiratory tract.

SECTION 3 HAZARD IDENTIFICATION (continued)

POTENTIAL HEALTH EFFECTS

ACUTE:

Eyes: Airborne mist or direct contact can cause mechanical irritation of eyes. If burning, redness, itching, pain or other symptoms persist or develop, consult physician.

Skin: Direct, prolonged or repeated contact with the skin may cause irritation.

Inhalation: Inhalation of mist when spray applying can irritate the nose, throat, and the upper respiratory tract. Persons subjected to large amounts of this mist will be forced to leave area because of nuisance conditions such as coughing, sneezing and nasal irritation. Labored breathing may occur after excessive inhalation. If respiratory symptoms persist, consult physician.

Ingestion: If ingested may cause temporary irritation to the gastrointestinal tract, especially the stomach. No known effects.

CHRONIC:

Eyes: None known.

Skin: None known.

Ingestion: No known effects.

Inhalation: Exposures to respirable crystalline silica are not expected during the normal use of this product; however, actual levels must be determined by workplace hygiene testing.

Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer. The development of silicosis may increase the risks of additional health effects. The risk of developing silicosis is dependent upon the exposure intensity and duration.

Animal studies indicate that prolonged and repeated overexposure to ethylene glycol may cause kidney and/or liver damage and birth defects. Overexposure is highly unlikely at concentrations present in this product.

Prolonged and repeated breathing of respirable mica dust may cause lung disease (pneumoconiosis).The extent and severity of lung injury correlates with the length of exposure and dust concentration.

TARGET ORGANS: Eyes, skin and respiratory system.

PRIMARY ROUTES OF ENTRY: Inhalation, eyes and skin contact.

SECTION 4
FIRST AID MEASURES

FIRST AID PROCEDURES

Eyes: In case of contact, do not rub or scratch your eyes. Flush thoroughly with water for 15 minutes to remove particles. If irritation persists, consult physician.

Skin: Wash with mild soap and water. A commercially available hand lotion may be used to treat dry skin areas. If skin has become cracked, take appropriate action to prevent infection and promote healing. If irritation persists, consult physician.

Inhalation: Remove to fresh air. Leave the area of dust exposure and remain away until coughing and other symptoms subside. Other measures are usually not necessary, however if conditions warrant, contact physician.

Ingestion: This product is not intended to be ingested or eaten. No harmful effects expected. No specific recommendations. If gastric disturbance occurs, call physician.

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED: Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

SECTION 5
FIRE FIGHTING MEASURES

General Fire Hazards:	Not expected to burn.
Extinguishing Media:	Water or use extinguishing media appropriate for surrounding fire.
Special Fire Fighting Procedures:	Wear appropriate personal protective equipment (See section 8).
Unusual Fire & Explosion Hazards:	None
Hazardous Combustion Products:	Above 800° C – limestone may decompose to calcium oxide (CaO) and carbon dioxide (CO_2). Above 175° C – polyvinyl acetate may decompose to H_2O, CO_2, CO, and acetic acid, could produce vinyl acetate monomers.

Flash Point:	None Known	**Auto Ignition:**	Not Applicable
Method Used:	Not Applicable	**Flammability Classification:**	Not Applicable
Upper Flammable Limit (UFL):	Not Applicable		
Lower Flammable Limit (LFL):	Not Applicable	**Rate of Burning:**	Not Applicable

SECTION 6
ACCIDENTAL RELEASE MEASURES

CONTAINMENT:
No special precautions. Wear appropriate personal protection (See Section 8).

CLEAN-UP:
Use normal clean up procedures. Wear appropriate protective equipment. Ventilate area. Floor may be slippery; use care to avoid falling. Shovel or scoop up material from spillage into a waste container for disposal.

DISPOSAL:
Follow all local, state, provincial and federal regulations. Never discharge large releases directly into sewers or surface waters. Trace amounts of residue can be flushed to a drain, using plenty of water.

SECTION 7
HANDLING AND STORAGE

HANDLING:
When spray applying, minimize mist generation and accumulation. Avoid breathing mist. Wear the appropriate respiratory protection against mist in poorly ventilated areas and if TLV is exceeded (see Sections 2 and 8). Avoid mist contact with eyes. Wear the appropriate eye protection against mist (See Section 8).
Use good safety and industrial hygiene practices.

STORAGE:
Store at room temperature in a dry location.
Protect from freezing, extreme heat, and exposure to direct sunlight.
Do not use if material has spoiled, i.e., there is a moldy appearance or an unpleasant odor. Close container and discard properly.
Keep tightly sealed following use.

SECTION 8
EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:
When spray applying and general ventilation is inadequate to control mist levels below permissible exposure limits (see Section 2) use process enclosures, local exhaust ventilation, or other engineering controls.
If engineering controls are not possible and mist levels exceed permissible exposure limits (see Section 2), wear a properly fitted NIOSH/MSHA-approved respirator (see Respiratory Protection below).

RESPIRATORY PROTECTION:
Wear a NIOSH/MSHA-approved respirator equipped when misty in poorly ventilated areas, and if TLV is exceeded. A respiratory program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

OTHER PERSONAL PROTECTIVE EQUIPMENT:
Eye/Face: Wear eye protection (safety glasses or goggles) to avoid particulate irritation of the eye.
Skin: Gloves or protective clothing are usually not necessary but may be desirable in specific work situations. For brief contact, no precautions other than clean body-covering clothing should be needed. Wear gloves and protective clothing to prevent repeated or prolonged skin contact. Barrier creams or skin lotion may be applied to face, neck, wrist and hands when skin is exposed to help prevent drying of skin.

General: Selection of Personal Protective Equipment will depend on environmental working conditions and operations.

SECTION 9
PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Gray to off white	**Odor**	Low to no odor
Physical State	Liquid	**pH**	~ 7.5-9
Vapor Pressure	17@20 °F	**Vapor Density**	Same as water
Boiling Point	212 °F	**Freezing Point**	32 °F
Melting Point	Not Applicable	**Solubility (H2O)**	Unlimited dispersibility
Specific Gravity	1.2-1.5	**Particle Size**	99% Finer than 250 microns
Softening Point	Not Applicable	**Evaporation Rate**	Not Applicable
Viscosity	300-840 Brabender Units at 20 °C	**Bulk Density**	1.2-1.5 Kg/Litre
Percent Volatile	15-45	**Molecular Weight**	Mixture
VOC Content	<2 g/l		

SECTION 10
CHEMICAL STABILITY AND REACTIVITY

STABILITY:	Stable.
CONDITIONS TO AVOID:	Contact with incompatibles.
INCOMPATIBILITY:	None known.
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION:	Above 800° C – limestone may decompose to calcium oxide (CaO) and carbon dioxide (CO_2). Above 175° C – polyvinyl acetate may decompose to H_2O, CO_2, CO, and acetic acid, could produce vinyl acetate monomers.

SECTION 11
TOXICOLOGICAL INFORMATION

ACUTE EFFECTS:

Direct contact may cause eye, skin and/or respiratory irritation.

LD_{50}: Not Available for product. LC_{50}: Not Available for product.

CHRONIC EFFECTS / CARCINOGENICITY:

Crystalline silica: Exposures to respirable crystalline silica are not expected during the normal use of this product; however, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer. The development of silicosis may increase the risks of additional health effects. The risk of developing silicosis is dependent upon the exposure intensity and duration.

In June, 1997, IARC classified crystalline silica (quartz and cristobalite) as a human carcinogen. In making the overall evaluation, the IARC Working Group noted that carcinogenicity in humans was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.

IARC states that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).

Vinyl acetate/acetaldehyde/formaldehyde: A component of this product is a common emulsion polymer most familiar as the component of ordinary white glue which exhibits the "sticky" characteristic. The emulsion polymer is not classified as a carcinogen by IARC, NTP or ACGIH. However, trace amounts of residual vinyl acetate monomers, acetaldehyde and formaldehyde may be associated with the production of the emulsion polymer.

Any exposure to vinyl acetate monomer, acetaldehyde, or formaldehyde is expected to remain well below OSHA regulatory and ACGIH recommended limits during normal handling and use of this product.

Petroleum Distillates: Prolonged and repeated exposure to petroleum distillate vapor may cause central nervous system damage as well as heart and blood disorders. Any exposure to petroleum distillate vapor is expected to remain well below OSHA regulatory and ACGIH recommended limits during normal handling and use of this product.

Ethylene Glycol: Animal studies indicate that prolonged and repeated overexposure to ethylene glycol may cause kidney and/or liver damage and birth defects. Overexposure is highly unlikely at concentrations present in this product. Trace amounts of 1,4 dioxane, acetaldehyde and ethylene glycol monomethyl ether may be associated with the production of ethylene glycol. Any exposure to these substances is expected to remain well below OSHA regulatory and ACGIH recommended limits during normal handling and use of this product.

Nonylphenol Ethoxylates: Nonyl phenol ethoxylate is an alkylphenol ethoxylate, and this group of chemicals has come under increasing scrutiny as possible endocrine disrupters in wildlife. In laboratory tests nonylphenol ethoxylate (NPE) and its break down ethoxylates disrupt the endocrine systems of fish, birds, and mammals. They cause feminization and demasculinization of male fish, causing them to synthesize egg yolk protein. They caused a reduction in testicular size in rainbow trout. They also caused proliferation of estrogen sensitive human breast tumor cells. Trace amounts of 1,4 dioxane, and ethylene oxide may be associated with the production of nonylphenol ethoxylate. Any exposure to these substances is expected to remain well below OSHA regulatory and ACGIH recommended limits during normal handling and use of this product.

Prolonged and repeated breathing of respirable mica dust may cause lung disease (pneumoconiosis).The extent and severity of lung injury correlates with the length of exposure and dust concentration.

SECTION 12
ECOLOGICAL INFORMATION

ENVIRONMENTAL TOXICITY: This product has no known adverse effect on the ecology. A large discharge directly into waterways would not be expected to kill aquatic life.

Ecotoxicity value: Not determined.

SECTION 13
DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:
Dispose of material in accordance with Federal, State, Provincial, and Local regulations. Consult with environmental regulatory agencies for guidance on acceptable disposal practices. Never discharge directly into sewers or surface waters.

SECTION 14
TRANSPORT INFORMATION

U.S. DOT INFORMATION: Not a hazardous material per DOT shipping requirements. Not classified or regulated.

Shipping Name	Same as product name.
Hazard Class:	Not classified
UN/NA #:	None. Not classified.
Packing Group:	None.
Label (s) Required:	Not applicable.
GGVSec/MDG-Code:	Not classified.
ICAO/IATA-DGR:	Not applicable.
RID/ADR:	None
ADNR:	None

SECTION 15
REGULATORY INFORMATION

UNITED STATES REGULATIONS
All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory.

MATERIAL	WT%	302	304	313	CERCLA	CAA Sec. 112	RCRA Code
Water	>40	NL	NL	NL	NL	NL	NL
Vinyl Acetate Butyl Acrylate Polymer	<20	NL	NL	NL	NL	NL	NL
Kaolin	<20	NL	NL	NL	NL	NL	NL
Limestone	<10	NL	NL	NL	NL	NL	NL
Titanium Dioxide	<5	NL	NL	NL	NL	NL	NL
Mica	<5	NL	NL	NL	NL	NL	NL
Ethylene Glycol	1-3	NL	NL	X	5,000	NL	NL
Petroleum Distillates	0-1	NL	NL	NL	NL	NL	NL
Crystalline Silica	<5	NL	NL	NL	NL	NL	NL

Key : NL = Not Listed
SARA Title III Section 302 (EPCRA) Extremely Hazardous Substances: Threshold Planning Quantity (TPQ)
SARA Title III Section 304 (EPCRA) Extremely Hazardous Substances: Reportable Quantity (RQ)
SARA Title III Section 313 (EPCRA) Toxic Chemicals: X= Subject to reporting under section 313
CERCLA Hazardous Substances: Reportable Quantity (RQ)
CAA Section 112 (r) Regulated Chemicals for Accidental Release Prevention: Threshold Quantities(TQ)
RCRA Hazardous Waste: RCRA hazardous waste code

FDA Food and Drug Administration [CFR Title 21, v.3, sec 184.1409] – Ground limestone is Generally Recognized as Safe (GRAS).

SECTION 15 REGULATORY INFORMATION (continued)

CANADIAN REGULATIONS

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. All components of this product are included in the Canadian Domestic Substances List (DSL).

MATERIAL	WT%	IDL Item #	WHMIS Classification:
Water	>40	Not Listed	Not Listed
Vinyl Acetate Butyl Acrylate Polymer	<20	Not Listed	Not Listed
Kaolin	<20	Not Listed	D2A
Limestone	<10	Not Listed	D2A
Titanium Dioxide	<5	Not Listed	Not Listed
Mica	<5	1088	Not Listed
Ethylene Glycol	1-3	716	D2A
Petroleum Distillates	0-1	Not Listed	Not Listed
Crystalline Silica	<5	1406	D2A

IDL Item # : Canadian Hazardous Products Act – Ingredient Disclosure List Item #
WHMIS Classification: Workplace Hazardous Material Information System

CARCINOGENICITY CLASSIFICATION OF INGREDIENT(S)

All substances listed are associated with the nature of the raw materials used in the manufacture of this product and are not independent components of the product formulation. All substances, if present, are at levels well below regulatory limits. See Section 11 : Toxicology Information for detailed information

MATERIAL	IARC	NTP	ACGIH	CAL- 65
Respirable Crystalline Silica	1	1	A2	Listed
Vinyl Acetate Monomer	2B	Not Listed	A3	Not Listed
Acetaldehyde	2B	2	A3	Listed
Formaldehyde	1	2	A2	Listed
1, 4 Dioxane	2B	2	A3	Listed
Ethylene Oxide	1	1	A2	Listed

IARC – International Agency for Research on Cancer (World Health Organization)
1- Carcinogenic to humans
2A – Probably carcinogenic to humans
2B – Possibly carcinogenic to humans
3 - Not classifiable as a carcinogen
4 – Probably not a carcinogen

NTP – National Toxicology Program (Health and Human Services Dept., Public Health Service, NIH/NIEHS)
1- Known to be carcinogen
2- Anticipated to be carcinogens

ACGIH – American Conference of Governmental Industrial Hygienists
A1 – Confirmed human carcinogen
A2 – Suspected human carcinogen
A3 – Animal carcinogen
A4 - Not classifiable as a carcinogen
A5 – Not suspected as a human carcinogen

CAL-65 – California Proposition 65 "Chemicals known to the State of California to Cause Cancer"

SECTION 16
OTHER INFORMATION

Label Information

ΔWARNING!

Mist created from product may cause eye, skin, nose, throat or upper respiratory irritation. When spray applying, avoid inhalation of mist and eye contact. Use in a well-ventilated area. Wear a NIOSH/MSHA-approved respirator when misty. Use proper ventilation to reduce mist exposure. Prolonged and repeated breathing of respirable mica dust may cause lung disease (pneumoconiosis). Wear eye protection. If eye contact occurs, flush thoroughly with water for 15 minutes. If irritation persists, call physician. Wash thoroughly with soap and water after use. Do not ingest. If ingested, call physician. Do not use if material has spoiled, i.e., there is a moldy appearance or an unpleasant odor. Close container and discard properly.

Product safety information: (800) 507-8899 or www.usg.com

KEEP OUT OF REACH OF CHILDREN.

Key/Legend

TLV	Threshold Limit Value
PEL	Permissible Exposure Limit
CAS	Chemical Abstracts Service (Registry Number)
NIOSH	National Institute for Occupational Safety and Health
MSHA	Mine Safety and Health Administration
OSHA	Occupational Health and Safety Administration
ACGIH	American Conference of Governmental Industrial Hygienists
IARC	International Agency for Research on Cancer
DOT	United States Department of Transportation
EPA	United States Environmental Protection Agency
NFPA	National Fire Protection Association
HMIS	Hazardous Materials Identification System
PPE	Personal Protection Equipment
TSCA	Toxic Substances Control Act
DSL	Canadian Domestic Substances List
NDSL	Canadian Non-Domestic Substances List
SARA	Superfund Amendments and Reauthorization Act of 1986
RCRA	Resource Conservation and Recovery Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
UN/NA#	United Nations/North America number
CFR	Code of Federal Regulations
WHMIS	Workplace Hazardous Material Information System

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